

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A porous composite product with a homogeneous structure having a property that renders it self-supportive, the product being provided in the form of a film, exhibiting a "BET" specific surface greater than $10 \text{ m}^2/\text{g}$ and being formed of a polymeric material and at least 20% by weight of at least one filler, the said product being obtained by extrusion and having an open porous structure, wherein the at least one filler exhibits a specific surface greater than $1000 \text{ m}^2/\text{g}$ and the mean diameter of a plurality of pores of the porous composite product is less than $0.5 \text{ }\mu\text{m}$.

2-3. (Canceled)

4. (Previously Presented) The composite product according to claim 1, wherein the polymeric material comprises elastomers or polymers chosen from the group consisting of polyolefins, acrylic polymers, aromatic polymers, polyamides, polyimides, vinyl polymers with a high proportion of ethyl monomers.

5. (Previously Presented) The composite product according to claim 4, wherein the polymeric material comprises elastomers or polymers chosen from the group consisting of polyethylenes, polypropylenes, ethylene- α -olefin copolymers.

6. (Previously Presented) The composite product according to claim 4, wherein the thermoplastic elastomers, soluble in polar organic solvents or water, which remain after the implementation of the manufacturing process are chosen from polyethers, poly(vinyl alcohol)s or ethylene-vinyl alcohol copolymers.

7. (Previously Presented) The composite product according to claim 6, wherein the composite product is 10 to 40% by weight of the polyolefin material, 5 to 40% by weight of the polyether, and the remainder is the at least one filler.